

WHAT IS CLAIMED IS:

1. An image coding apparatus comprising:  
compression coding means for compressing and coding an input video signal;  
scene change detecting means for detecting a scene change from the input video signal; and  
resolution changing means for changing a resolution of the input video signal synchronously with the scene change.
2. An image coding apparatus comprising:  
compression coding means for compressing and coding an input video signal;  
still scene detecting means for detecting a still scene from the input video signal; and  
resolution changing means for changing a resolution of the input video signal when the still scene is detected.
3. An image coding apparatus comprising:  
compression coding means for outputting an MPEG stream by compressing and coding an input video signal; and  
resolution changing means for changing a resolution of the input video signal, wherein the compression coding means includes means for determining a GOP (group of pictures) structure of the MPEG stream, and  
wherein when the resolution is changed, GOPs are also changed substantially at the same time.
4. The apparatus of claim 3, wherein the GOP structure determining means makes the GOP, which starts just after the resolution has been changed, a closed GOP that does not refer to a previous GOP.
5. The apparatus of claim 3, wherein the GOP structure determining means makes the GOP, which starts just after the resolution has been changed, begin with an I (intra) frame.

6. The apparatus of claim 3, wherein the compression coding means further includes means for changing VOBs (video objects), each said VOB being made up of the GOPs, and

wherein when the resolution is changed, the VOBs are also changed substantially at the same time.

7. The apparatus of claim 6, wherein the VOB changing means stops changing the VOBs when the number of the VOBs reaches a predetermined maximum number.

8. The apparatus of claim 6, wherein once the VOB changing means has changed the VOBs, the VOB changing means will not change the VOBs again until a predetermined time has passed.

9. The apparatus of claim 8, wherein the predetermined time is obtained by dividing a total recordable time by a predefined maximum number of, the total recordable time being obtained by dividing a total capacity of a storage medium, on which the MPEG stream should be recorded, by a target average rate of the MPEG stream.

10. The apparatus of claim 8, wherein the predetermined time is obtained by dividing a remaining recordable time by a difference between a predefined maximum number of VOBs and the number of VOBs already recorded, the remaining recordable time being obtained by dividing an available capacity of a storage medium, on which the MPEG stream should be recorded, by a target average rate of the MPEG stream.

11. The apparatus of claim 6, wherein in changing the VOBs, the VOB changing means inserts an end code, which represents the end of the former VOB, into the MPEG stream.